



## Department of Energy

Idaho Operations Office  
1955 Fremont Avenue  
Idaho Falls, ID 83415

April 12, 2007

SUBJECT: Final Environmental Assessment for the National Security Test Range and Finding of No Significant Impact (TD&D-NS-07-013)

Dear Interested Party:

The U.S. Department of Energy (DOE) has completed the Final Environmental Assessment (EA) for the National Security Test Range at the Idaho National Laboratory and determined that a Finding of No Significant Impact (FONSI) was appropriate. The draft EA was made available for 37-day public review and comment period on December 6, 2006. DOE considered all comments made on the draft EA when developing the final EA and selecting the alternative that best meets the purpose and need. A Response to Comments section has been provided as Appendix C of the Final EA.

If you have any questions regarding the final EA or FONSI, please contact Don Michaelson at 208-526-5325 or by email at [michaeds@id.doe.gov](mailto:michaeds@id.doe.gov).

A handwritten signature in black ink, appearing to read "Elizabeth D. Sellers", is positioned above the printed name.

Elizabeth D. Sellers  
Manager

Enclosures

**U.S. DEPARTMENT OF ENERGY  
FINDING OF NO SIGNIFICANT IMPACT FOR THE ENVIRONMENTAL  
ASSESSMENT FOR THE NATIONAL SECURITY TEST RANGE**

**Agency:** U.S. Department of Energy (DOE)

**Action:** Finding of No Significant Impact (FONSI)

**Summary:** DOE prepared an Environmental Assessment (EA) for the National Security Test Range (DOE/EA-1557). The proposed action consists of consolidating all Idaho National Laboratory (INL) National Security security systems testing activities at one centralized location that can accommodate the increased explosives weights and eliminate scheduling conflicts. The proposed test range would be specifically designed and constructed to accommodate testing activities in support of analyzing the effects of explosives and explosive devices, munitions, and similar items on security systems, facilities, vehicles, structures and other materials. Four alternatives were considered – (1) Consolidate Testing on a New National Security Test Range (Preferred Alternative), (2) Consolidate Testing at One of the Current Ranges at the INL, (3) Consolidate Testing at an Off-Site Facility, and (4) No Action. Based on the alternative selection criteria, Alternatives 2 and 3 were eliminated from detailed analysis.

The EA was prepared in accordance with the Council on Environmental Quality (CEQ) Regulations for implementing the National Environmental Policy Act (NEPA) (40 CFR Parts 1500-1508), and the DOE NEPA Implementing Procedures (10 CFR Part 1021).

The draft EA was released on December 6, 2006 for public review and the comment period ended on January 12, 2007. DOE received comments from the Shoshone-Bannock Tribes, State of Idaho Department of Environmental Quality, the U.S. Fish and Wildlife Service, The Nature Conservancy in Idaho, Snake River Alliance and five members of the public. DOE responded to those comments and revised portions of the EA, as appropriate. Based on the analysis in the EA, DOE has decided to pursue implementation of Alternative 1, Consolidate Testing on a New National Security Test Range at the INL.

**Selected Alternative:**

**Consolidate Testing on a New National Security Test Range at the INL**

DOE will consolidate all INL security system testing activities at one centralized location that can accommodate the increased explosives weights and eliminate scheduling conflicts.

The National Security Test Range will be located about 1.5 miles west of Road T-25, 7.1 miles north of the Materials and Fuels Complex (MFC), and 10 miles south of Test Area North. The location was selected because it is separated from any surrounding population or facilities that could be affected by blast or sound and access to the area can be effectively controlled. Radiological materials have not contaminated the soil at the selected location and the test range is in an area that does not contain unexploded ordnance.

Semi-permanent infrastructure (buried data acquisition cables, protective camera boxes and other such devices) will be installed. The selected alternative will establish a 900-ft diameter mowed test bed, earthen berm, a concrete test pad, new access road, and lay-down and administrative areas at the selected location.

**Analysis:** Based on the analyses in the EA, the selected alternative would not have, and would likely prevent, a significant effect on the human environment within the meaning of NEPA. The term “significantly” and the significance criteria are defined by the CEQ Regulations for implementing NEPA at 40 CFR Part 1508.27. The significance criteria are addressed below.

**1) Beneficial and adverse impacts [40 CFR Part 1508.27 (b)(1)]:**

The selected alternative will accommodate increasing scale and frequency of explosives testing in support of the INL vulnerability assessment mission thereby enhancing U.S. national security (Section 1, pp. 1-2). The analysis indicates that there will not be any significant impacts from implementing the selected action (Section 4, pp 25-35).

**2) Public health and safety [40 CFR Part 1508.27 (b)(2)]:**

No adverse impacts to human health and safety are anticipated from the selected alternative. Appropriate precautions and procedures will be employed to minimize health and safety risks (Table 1, pp. 9-11). All personnel involved with construction and operations, including those handling explosives, will be properly trained, use appropriate protective equipment and maintain close communication with one another. Each work activity will include processes to identify, analyze, and control the hazards. The closest INL facilities and employees not involved in conducting tests will be at the MFC, which is 7.1 miles from the test range area. Characteristic noise associated with testing would occur as pulses rather than continuous noise. Noise pulses would occur at levels below the limits established by the Occupational Safety and Health Administration standards. Industry recognized blasting safety standards recommend maintaining peak ground velocities below 2.0 inches per second (ips) to prevent damage to light civilian type structures. The maximum ground velocity at the nearest area with structures at MFC would be 0.006 ips. Therefore noise and ground motion from a 20,000 lb explosive test would not pose any significant impact to personnel or facilities on or off of the INL (Section 4.1.5, pp. 32-33)

The explosive material limits established for the test range will limit emissions such that National Ambient Air Quality Standards and Toxic Air Pollutants air quality standards will not be exceeded. Fugitive dust will be controlled as appropriate by applications of water or chemical suppressants to unpaved roads and work areas. Worker exposure will be controlled through the established INL worker protection programs, and the dust plume would be largely dissipated before reaching the site boundary or nearest road where the general public would have potential for exposure. At the point where the public could be exposed to particulate matter from activities at the test range, the modeled 15 minute averaged concentration is less than 2 mg/m<sup>3</sup>. This is less than the OSHA respirable particulate matter concentration limit of 5 mg/m<sup>3</sup>. Radionuclides in the soil are typical of regional background concentrations and would not pose elevated dose risk to members of the public. The proposed intermittent, short duration testing activities coupled

with the remote location of the proposed test range would ensure that adverse air quality effects upon potential receptors and Class 1 areas are minimal (Section 4.1.3, pp 29-31).

**3) Unique characteristics of the geographical area [40 CFR Part 1508.27 (b)(3)]:**

The test range area does not contain unique characteristics relative to the rest of the INL Site. The total area impacted will be approximately 12 acres, which compares to a total area of approximately 570,000 acres for the INL Site. Standard procedure will be implemented to reduce or eliminate potential impacts (Table 1, pp. 9-11). The selected alternative will have localized impacts and will not adversely affect the overall unique characteristics of the INL Site (Section 2.1, pp. 3-6).

**4) Degree to which effects on the quality of the human environment are likely to become highly controversial [40 CFR Part 1508.27 (b)(4)]:**

The analysis in the EA indicates implementing the selected alternative will result in no significant effects on the quality of the human environment. There were 10 comment providers representing individuals and organizations. DOE has responded to these comments by providing additional information and making revisions to the EA. Given the comments received, it is clear that some controversy exists regarding this proposed activity, although such controversy does not rise to the level of being considered “highly controversial” from a NEPA standpoint.

**5) Uncertain or unknown risks on the human environment [40 CFR Part 1508.27 (b)(5)]:**

There are very few uncertain or unknown risks associated with implementing the selected alternative (Section 4, pp 25-35).

**6) Precedent for future actions [40 CFR Part 1508.27 (b)(6)]:**

The selected alternative does not set a precedent for future actions.

**7) Cumulatively significant impacts [40 CFR Part 1508.27 (b)(7)]:**

There would be no significant cumulative impacts associated with implementing the selected alternative (Section 4.1.9, pp. 34-35).

**8) Effect on cultural or historical resources [40 CFR Part 1508.27 (b)(8)]:**

Impacts to cultural resources as a result of construction activities and operations at the test range have been analyzed and procedures have been specified which should minimize any such impacts (Table 1, pp. 9-11). Ground disturbance associated with the construction of the test range, new access road, buried cable route, lay down/administrative area, and improvements to Road T-25 will occur and have the potential to impact prehistoric archaeological sites, a historic trail, and Native American resources located in the project area. A survey of the area yielded no artifacts within the proposed construction zone. Any artifacts discovered during the construction of the range would be preserved by altering the route of the new road or moving the construction

zone. Gravel will be used to improve the existing T-25 access road. Artifacts that cannot be avoided during activities to upgrade road T-25 will be mapped and relocated to prevent impact. Test activities will be conducted in manner to minimize cultural resource impacts. (Section 4.1.2, pp. 28-29)

**9) Effect on threatened or endangered species or critical habitat [40 CFR Part 1508.27 (b)(9)]:**

The selected alternative, would not have a significant effect on threatened or endangered species or critical habitat. Appropriate precautions and procedures will be employed to minimize impacts on species that have a potential to become listed in the future (Section 4.1.1, pp. 25-28).

**10) Violation of Federal, State, or Local law [40 CFR Part 1508.27 (b)(10)]:**

The selected alternative would not violate any federal, state or local law (Section 6, p. 38).

**Determination:** Based on the analyses presented in the attached EA, I have determined that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, preparation of an environmental impact statement is not required.

Issued at Idaho Falls, Idaho on this 12 day of April, 2007.



Elizabeth D. Sellers,  
Manager, Idaho Operations Office

Copies of the EA and FONSI are available from: Brad Bugger, Office of Public Affairs, Idaho Operations Office, U.S. Department of Energy, 1955 Fremont Ave., Idaho Falls, ID 83415, (208) 526-0833 or the toll free citizen inquiry line at (800) 708-2680.

For further information on the NEPA process, contact: Jack Depperschmidt, NEPA Compliance Officer, Idaho Operations Office, U.S. Department of Energy, 1955 Fremont Ave., Idaho Falls, ID 83415, (208) 526-5053.